PATENT COOPERATION TREATY

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INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Annlie	cant's or agent's file referer					
	30097WO	FOR FURTHER AC	CTION	See Form PCT/IPEA/416		
	national application No. /ES2003/000490	International filing date 26.09.2003	(day/month/year)	Priority date (day/month/year) 26.09.2003		
	national Patent Classification	on (IPC) or national classification and II	PC			
Appli RID	icant ER ANZADALA, Rob	erto] Bosingo, s	. ۲۰			
1.	1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.					
2.	This REPORT consist	s of a total of 5 sheets, including t	his cover sheet.			
3.	This report is also acc	ompanied by ANNEXES, comprisi	ng:			
•		licant and to the International Bure	•			
	and/or she			n amended and are the basis of this report y (see Rule 70.16 and Section 607 of the		
	sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.					
			indicate type and nu	mber of electronic carrier(s)) , containing a		
	sequence listin	• • • • • • • • • • • • • • • • • • • •	computer readable for	orm only, as indicated in the Supplemental		
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4.	4. This report contains Indications relating to the following items:					
	☑ Box No. I Bas	Is of the opinion				
	☐ Box No. II Pric	•				
			ard to novelty, inven	tive step and industrial applicability		
	☐ Box No. IV Lac	k of unity of invention				
		asoned statement under Article 35 dicability; citations and explanation				
		tain documents cited				
	☐ Box No. VII Cer	tain defects in the international ap	plication			
	☐ Box No. VIII Cer	tain observations on the internation	nal application			
Dat	te of submission of the dem	nand	Date of completion	of this report		
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19	.04.2005		03.01.2006			
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INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No. PCT/ES2003/000490

	Box No. I Basis of the report				
1.	. With regard to the language , this report is based on the international application in the language in which it wa filed, unless otherwise indicated under this item.				
	★ This report is based on transle which is the language of a transle.	ations from the original language into the following language English, inslation furnished for the purposes of:			
	☐ international search (under publication of the international preliminary expressions)	er Rules 12.3 and 23.1(b)) onal application (under Rule 12.4) examination (under Rules 55.2 and/or 55.3)			
2.	With regard to the elements* of the have been furnished to the receiver report as "originally filed" and are	he international application, this report is based on (replacement sheets which ving Office in response to an invitation under Article 14 are referred to in this not annexed to this report):			
	Description, Pages				
	1-6	as originally filed			
	Claims, Numbers				
1-13		as originally filed			
	Drawings, Sheets				
	1/1	as originally filed			
	☐ a sequence listing and/or an	y related table(s) - see Supplemental Box Relating to Sequence Listing			
3	. The amendments have resu	lited in the cancellation of:			
	the description, pagesthe claims, Nos.				
	☐ the drawings, sheets/figs				
•	☐ the sequence listing-(spe ☐ any table(s) related to se				
4	I. This report has been estable had not been made, since they Supplemental Box (Rule 70.2(c))	ished as if (some of) the amendments annexed to this report and listed below have been considered to go beyond the disclosure as filed, as indicated in the).			
	the description, pagesthe claims, Nos.				
	☐ the drawings, sheets/figs				
	□ the sequence listing (sp□ any table(s) related to s				
	* If item 4 applies, s	ome or all of these sheets may be marked "superseded."			

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

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Novelty (N)	Yes:	Claims	1-13
	No:	Claims	none
Inventive step (IS)		Claims Claims	1-13 none
Industrial applicability (IA)	Yes:	Claims	1-13
	No:	Claims	none

2. Citations and explanations (Rule 70.7):

see separate sheet

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Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

Reference is made to the following documents:

D1: ES 1 045 625 U1 D2: DE 35 46 548 A1

The document D1 is regarded as being the closest prior art to the subject-matter of claim 1, and shows (the references in parentheses applying to figure 2 of this document):

A horn, incorporating

- coaxial pressure (7) and acoustic (5) chambers,
- a vibrating strip (9), arranged between the chambers,
- the strip being coaxial with the acoustic chamber,
- the strip being fixed at its periphery to the free edge(3) of the partition forming the enclosing or chamber.

The subject-matter of claim differs from this known horn in that

- it incorporates a blow tube and
- the strip consists of plastic coated aluminium.

The subject-matter of claim 1 is therefore new (Article 33(2) PCT).

The problem to be solved by the present invention may be regarded as making the membrane stronger, while still maintaining good acoustical properties.

The solution to this problem proposed in claim 1 of the present application is considered as involving an inventive step (Article 33(3) PCT) for the following reasons:

The use of aluminium to make stronger acoustic membranes is known per se, see e.g. document D2, abstract. The membrane of document D2, however, would lack

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the air sealing properties of a prior art polymer or rubber membrane (see D1, column 2, line 20) and therefore sound worse. Therefore the skilled man would not apply the membrane of D2 to the horn of D1.

The subject-matter of claim 1 is therefore inventive (Article 33(3) PCT).

Claims 2 to 13 are dependent on claim 1 and as such also meet the requirements of the PCT with respect to novelty and inventive step.